NEW ENGLAND FARMER.

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HORTICULTURE.

DISEASE IN GRAPE VINES.

Mr FESSENDEN.—The enclosed letter, being a reply to one from me making inquiries respecting the cause of a disease which has this season attacked my grape vine, I send for publication, (being authorized by the writer,) presuming the information contained in it may be useful to those who are cultivating the vine in New England.—In order to give a better understanding of the letter, and with the view of eliciting further information on the subject from some of thy correspondents, I will briefly state the manner of attack, and the progress of the disease alluded to.

I received from Flushing, Long Island, in the spring of 1823, a grape vine of the celebrated sort called *Isabella Grape*, which grew finely, and produced in 1826 about three bushels of grapes.—About the time of its blossoming this year, I observed a number of leaves on the lower part of the vine, to have spots on them resembling iron rust, which in a short time extended over the leaf, and finally killed it. The spots would also appear on the leaf stem, and on the young shoots of the vine, not, however, affecting the fruit until it attained to the size of a large pea, when it attacked that also. A small reddish spot, resembling a rotten speck in an apple, would appear on one side of the grape, and spread so rapidly as in one or two days completely to surround, and entirely to kill it.—The disease, thus far, has been confined to about half the vine, on which part the fruit is mostly killed. Respectfully, thy friend,

JOHN OSBORNE.

Smithfield, (R. I.) 8th month 1, 1827.

[TRANSLATION.]

To Mr JOHN OSBORNE—I have received your favour of the 13th current, concerning the malady of the grape vine, which you planted in 1823. I answer you in French, because although I understand the English language, I am not habituated to writing it. The disease is a very dangerous one, for which the remedies hitherto applied are not wholly effectual. It proceeds, oftentimes, from two opposite causes—a soil too highly manured, or too poor—the application of too powerful and active dung may occasion it—or if the vine has not a sufficiently free circulation of air. Rains and humidity may often produce the disease. It is not an insect, which causes it; it is a plant of the fungus tribe, which propagates itself in an extraordinary manner. Some plants of this sort are white, and are called generally the miller—others are red or black. They are all dangerous on account of the extent and rapidity of the injury which they do to trees. This complaint is not common in open and exposed situations. The curative or remedial means are, to collect all the leaves which fall, and to burn them, which should be repeated till the plant loses its last in autumn,—washing the leaves with a composition of flour of sulphur, black soap, and tobacco leaves, a receipt for which I sent to my respectable friend Hon. JOHN LOWELL, President of the Agricultural Society of Massachusetts, who caused it to be inserted in the New England Farmer, last year,* which you probably take, or can procure from one of your friends.

This composition, which can never produce any ill-effects, will in a great measure check the progress of this fungus or parasitic plant, the cause of the disease on your vines.

I am sorry that you did not write to me earlier, for if you continue to abandon your vine to itself, I would not answer for its life. Be pleased to write me, if you should receive any benefit from the application of my remedy, for it is a point of great interest with me, to see the vine successfully cultivated in this country. As this disease affects the plant greatly, and weakens it, I would advise you to sacrifice the fruit which is now on it, for they will come to little or nothing. This may give more force to the vine, which at best will suffer by being obliged to push forth new leaves. I would also strip off a quarter of the leaves which are most injured, but not more.

You are authorized to publish this letter in the New England Farmer, for the Editor of which I have the highest esteem; and I shall be happy if I can aid the numerous readers of that paper in the culture of a fruit so delicious as the grape.

I am, with esteem, your
Very humble servant,
ANDREW PARMENTIER.

Horticultural Garden, Brooklyn, N.Y. July 17.

DISEASE IN APPLE TREES.

Mr FESSENDEN—I am grieved to state, that a disease has this year appeared on many of my apple trees, (from 20 to 30 years old) which resembles in its effects the disease of the Pear trees.—It attacks the extremities, which die suddenly with the fruit upon them, which instantly becomes dry, and as hard as dry wood. The trees attacked are in all sorts of soils, some in bearing, and some which never bore. I have been always afraid that the insect would go to the apple, as its wood is so much allied, or so similar, to that of the pear, being, in fact, of the same family.

Respectfully yours, J. LOWELL.

Roxbury, Aug. 1, 1827.

FRUIT TREES.

Mr FESSENDEN—The following question is addressed to experienced cultivators of fruit, and an answer requested by W. D.

Will suckers proceeding from the roots of fruit trees, if grafted, make as good and fruitful trees, as seedlings?

ARABIAN HORSE.

The Arabian horse *Godolphin*, the best ever imported into England, was introduced in the following manner. Col. Cook, a man of wealth, education, and polished manners, but a highway robber, committed two acts of felony about the year 1720; and thinking it impossible to elude the hand of justice if he remained in England, he embarked for the Mediterranean, and travelled through Syria into Arabia Petrea, where he made constant inquiries of the Arabs concerning the best horses in the country. Having received information that a certain Sheik had the best horse in all Arabia, he went to him, and offered him any sum of money he pleased to demand for said horse. The Arab scornfully rejecting his offer, he skulked about in the vicinity, and when a favorable opportunity offered, stole the horse, and travelled through the deserts until he arrived at Damietta, near the mouth of the Nile, where he embarked with his horse, on board of a British ship. He arrived in England, and knowing his crimes were so great that he must perish, unless the prime minister interposed in his behalf, he went to lord Godolphin, under a fictitious name, and after many entreaties persuaded his lordship to accept of this fine Arabian horse as a present. Soon after this, he was discovered, arrested, and committed to prison for his former crimes. He wrote to lord Godolphin, disclosing his real name, and requesting his intercession with the king. The king ordered a writ of *nolle prosequi* to be issued, declared that Cook could not be the man who committed the felonious acts, and restored him to his former rank and fambility.—The foregoing is an abstract of an account published in a Virginia paper.

Dr Sturm, professor of agriculture in the University of Bonn, in his breeds of horses, calls the Arabian horse the primitive race, or the horse of the dry plains. The breeds the nearest to the Arabian, and which have been produced by crossing, are the Egyptian and Persian, which differ but little from the Arabian; the Turkish, derived from a mixture of the Arabian and Persian; the Barbary and Tartar; the breeds of Hungary and Poland; and the English saddle horse, which is a product of art.—(Translated from the "Bulletin des Sciences.")—*Hamp. Gaz.*

VOLCANOES.

Dr. Daubeny, who has examined and described most of the volcanoes in Europe, ascribes their action to the heat produced in the metallic bases of the earths and alkalies in the interior of the earth, by the access of water. As the lavas and other products of volcanos are composed of materials intimately allied with the constituent parts of granitic and other primary rocks, feldspar and mica, variously modified, forming more than nine-tenths of the whole; Dr D. concludes that the volcanic force is situated among the older rock formations, at a depth at least as great as that to which granite extends. The enormous quantity of matter that has been ejected from volcanoes, affords conclusive proof that the volcanic agency is situated at a great depth. The matter thrown out by Vesuvius at different times far exceeds the bulk of the mountain, and yet the latter has undergone no diminution. With regard to water finding access to the inflammable, metallic bases, Dr D. states that nearly all the volcanoes on the globe are situated within a short distance of the sea, or occur in ranges of mountains the extremities of which are close to the sea; and he supposes that the water at the bottom of the ocean is forced through the pores and crevices of the subjacent rock, by the powerful influence of pressure derived from the vast column of superincumbent fluid. Earthquakes are believed to derive their origin from the same cause. The shocks are most

* See New England Farmer, vol. v. page 49.

severe in countries where there are no volcanoes to give vent to the elastic force. The eruptions of Vesuvius and Etna are almost always preceded by earthquakes, which cease as soon as an opening has been made in the mountain.

Dr. D. describes the vast extent of the volcanic matter which Etna has poured forth. Some of the beds of lava are 4 or 5 miles in breadth, 15 miles in length, and from 50 to 100 in thickness.

DR HARRIS' ESSAY ON THE MELOLONTHA.—Concluded from page 10.

The *rose-chaffer*, or *rose-bug*, as it is commonly called, is also a diurnal Melolontha. It is, exclusively, an American insect, and presents such peculiarities in form as would warrant its separation from the genus Melolontha,* although it agrees with others of the genus in habits and œconomy.

This species is described by Fabricius as Melolontha *subspinosa*, because the thorax is armed, on each side, with a blunt spine, or tubercle; it is called M. *polyphaga* by Melsheimer, probably because of its voracity; *elongata*, by Herbst, from its elongated form; and *angustata*, by Beauvois, from the narrowness of its thorax. A description of this well known insect would be superfluous.

As to its habits—among the most remarkable are its voracity and salaciousness. It attacks, without much discrimination, almost every tree, shrub, and plant, such as the oak, elm, cherry, and apple trees, the rose, sumach, and elder shrubs, and even herbaceous plants, particularly the common white-weed, Chrysanthemum *leucanthemum*. Generally, during the day-time, we find these insects paired, the male holding the female closely embraced, even when not *in coitu*. The male is readily distinguished by the greater length of the legs, and the elongated, pointed extremity of the body.

The rose-chaffer makes its appearance at the time of blossoming of the damask rose, which usually happens about the middle of June. It is remarkable that it does not attack the cinnamon rose, which blooms earlier, and is often found on the elm and oak before it appears on the garden and wild rose. It continues about four weeks, and then suddenly disappears, and in three or four days scarcely an individual is to be seen.—The first *rose-chaffer* that I observed the present year (1826,) was discovered on a small elm shrub, on the sixth of June; none had as yet appeared on the rose. The general disappearance of these insects took place on the eighth of July, although a few individuals still remained on the flowers of the elder, as late as the fifteenth of July. A vulgar notion prevails that the rose-bug turns into a green horse-fly, because the common Tabanus makes its appearance about the time that the former disappears. This opinion is incorrect, though not more inconceivable than the known metamorphoses of insects.

After the sexual union is accomplished, the males perish: you may then see thousands of them dead on the ground beneath your rose-bushes, and you will seldom find a female among them. The latter at this time enter into the earth to deposit their eggs. I have found the female more than a foot below the surface, where she was probably preparing to oviposit. Towards the termination of their ravages the females are frequently found solitary, seem considerably defaced, the downy coat which covers their thorax and elytra being rubbed off. From this circumstance we may conjecture that these individuals have already entered the earth and deposited their eggs, and have returned to the surface to linger a few days without further sexual union.

I have not ascertained the period when the larva is hatched, nor the length of time that expires before it attains its growth. Nor am I positive as to the identity of the larva; although I have strong reasons for believing that what I have taken to be such is really so; further observation is however necessary. The supposed larva is a small white grub; the head covered with a corneous shell of a yellowish colour; the mouth armed with strong mandibles or teeth; and the anterior extremity furnished with six short feet; a dark line runs down the back, occasioned by the dorsal vessel, containing a blueish fluid, which is conspicuous from the transparency of the skin.—The larva moves with considerable celerity when first taken out of the earth: it is about half an inch long, and one line in diameter. That it is the grub of a Melolontha is certain from its close resemblance to that of others of this genus; that it is, most probably, the larva of the rose-bug is to be inferred from its being found in the same location as the pupa, and in considerable quantities.

The *pupæ*, from which I obtained rose-bugs, were found early in June, (1826,) three or four inches beneath the surface of the ground. They are of a yellowish white colour, which gradually becomes darker as they approach the perfect state. In the pupa the rudiments of the wings, the antennæ and the legs are discoverable, folded under the body, and enclosed beneath a thin membrane, which wraps each separately; the eyes appear as two blue spots; the dorsal segments of the body are prominent in ridges; the tail is acuminated, and retains upon it, the exuviæ or cast-skin of the pupa, until a few days before it throws off its last covering, and emerges from the earth a perfect insect. This last and important change is not effected but by the greatest efforts, during which the pupa appears to writhe in agony, until, by its continued exertions, it bursts its membranous shroud, and crawls to the surface, where its wings are expanded and dried, and it becomes, from a grovelling worm of the earth, an animated tenant of the air. This interesting metamorphosis I had the pleasure of witnessing through the side of a glass vessel containing earth in which I had placed several of the pupæ.

An insect in its larva or grub state may be said to be *in embryo;* as its organs are more and more developed, the different *membranes*, or skins, are successively ruptured and cast off, and when it has finally extricated itself from its last covering, and emerged from its mother earth, it bursts into life a perfect adult, and finds itself endowed with new powers, and feels the influence of new desires. In this state, only, is it capable of continuing its species, and furnished with wings to carry it through the air in search of companions and food.

Rose-bugs are eaten greedily by fowls; but young chickens sometimes suffer severely from swallowing them alive. A simple remedy consists in pouring sweet-oil down their throats.—When the powers of the rose-bug are exhausted it falls to the ground, and furnishes food for various insectivorous animals, particularly ants. In France, a large insect, called *vinaigrier*, (Carabus *auratus*, Lin.) devours the female Melolontha *vulgaris* at the moment when she is about to deposit her eggs. I have taken one specimen of this fine Carabus in this state, and we have several other species which are equally predaceous, and which probably contribute to check the increase of our native species of Melolontha.

French writers mention several methods which have been proposed for the extermination of these insects. Most of them are ineffectual.* Buchoz, in his *Histoire des Insects nuisables*, I., 132, says, that Christain Kleeman, in a memoir sanctioned by the Electoral Palatine Academy, gives the history of that species called by the French *Hanneton vulgaire*. His observations were made in 1761 and 1762, when these insects were very numerous and destructive. He recommends making a general pursuit of them; declaring that he had killed more than one thousand in one day. This I suspect will prove to be the best method. It has been found useful to strew upon the grape-vine airslacked lime, which causes the rose-bugs to abandon it. Fires by night do not attract them. I have held a bright light, without in the least exciting them; and although this light was exhibited in the open air, in their immediate vicinity, for a long time, not one rose-bug approached it. The Abbe Rosier, in his *Cours d' Agriculture*, (article *Hanneton*,) advises to collect and destroy the perfect insect for several years in succession. This should be made a general pursuit in order to be effectual; and females and children might be employed in it.

The causes that contribute to the growth and increase of the larvæ are not sufficiently understood. The severity of winter, and the coldness and moisture of a succeeding spring, do not always appear to check the numbers of the perfect insect, which are often, according to Olivier,† developed in greater abundance after such seasons. Neither can we predict a great increase from an abundant oviposition; for the eggs may not be hatched, the larvæ may perish, or the pupæ remain too weak to undergo their last metamorphosis. On the contrary, a small number of eggs, deposited under circumstances favorable to their being hatched, and the larvæ perfected without accident, will cause an increased quantity of the perfect insects.

Certain localities are thought to be favorable to the increase of the rose-bug; what these are I have not ascertained; but should imagine that a

*Stenothorax would be an appropriate name for the subgenus having the *subspinosa* for its type.

Scarabæus *lanigerus*, Linnæus Melolontha *lanigera*, Fabr. has been referred to the genus Rutela; but Schonherr says it is not a Rutela, and arranges it between M. *fastuosa*, and M. *aurata*, F., belonging to the genus Anomala? it may therefore be considered as the type of a new subgenus. See Schonherr's Synonymia Insectorum, III. p. 504. Scarabæus *punctatus*, Lin., Melolontha *punctata*, Fabr. or Rutela *punctata*, Latreille, belongs to Mr MacLeay's genus Pelidnota.

Melolontha *varians*, Fabr. is congeneric with the Anomala *vitis* of Megerle and Koppe.

*See Nouv. Dictionaire d'Histoire Naturelle, article *Hanneton*.

† Olivier's remarks refer to the M. *vulgaris*.

warm fertile, and rather dry soil, which is not disturbed by the plough or spade, would furnish an appropriate *nidus* for the egg.

ON MARL.

Marl, like lime, may be viewed as a stimulant, forcing the soil to produce crops of corn and grass, which otherwise would not have been obtained. Marl has been long known to the husbandman of Great Britain; and, if we give credit to Pliny, this article was used prior to the Roman invasion. Several kinds are enumerated by the ancient Latin writers, and all of them declare that that the soil was greatly enriched by the application of marl.

In many parts of this island the value of land has been much augmented by the application of marl. Treating of this article in a practical way, it may be divided into shell-marl and earth-marl. Shell-marl is composed of animal-shells dissolved; earth-marl is a fossil. The color of the latter is various; white, black, blue, red, and its hardness is as various as its color; being sometimes soft and ductile like clay, sometimes hard and solid, like stone, and sometimes extended into thin beds, like slate. Shell-marl is easily distinguished by the shells which always appear in it; but the similarity betwixt earth-marl and many other fossil substances renders it difficult to distinguish them.

Shell-marl is very different in its nature from clayey and stone-marls, and, from its effects upon the soil, is commonly classed among the animal manures. The Rev. Mr. Dickson states, "That it does not dissolve with water as the other marls do. It sucks it up, and swells like a sponge. It is a much stronger attracter of acids than they." Dr. Home says, that it takes six times more of acids to saturate it than any of the other marls which he had met with. But the greatest difference betwixt the shell-marl and the other marls consists in this, the shell marl contains oils. It is uncertain if the other marls contain any oils; but this kind it is said, contains them in great plenty.

This marl, it would seem, from the qualities which it possesses, promotes vegetation in all the different ways. It increases the food of plants; it communicates to the soil a power of attracting this food from the air; it enlarges the pasture of plants; and it prepares the vegetable food for entering their roots.

The shelly sand, often found deposited in beds in the crevices and level parts of the sea-coasts, is another substance capable of being employed both as a manure and stimulant; not only on account of its containing calcareous matter in greater or less proportions, but also from the mixture of animal and vegetable substances that are found in it. The portion of calcareous matter which it contains must vary according to circumstances; but, when the quantity is any way large, and in a reduced or attenuated state, the quality is so much the more valuable. On that account, the quantity which ought to be applied to the soil must be regulated entirely by the extent of calcareous matter supposed, or found, upon trial, to be contained in the article, which, as already said, is very variable.

The clayey and stone marls are distinguished by their colors; viz. white, black, blue, and red. The white, being of a soft crumbly nature, is considered to be the best for pasture land; and the blue, which is more compact and firm, for corn land. In the districts where marl is much used, these distinctions of management are attended to, though either of the kinds may be employed with advantage if the following rules are adhered to.

If marl is of the blue kind, or of any kind that is compact and firm, lay it upon the land early in the season, so as the weather may mellow it down before the last plough; and, if on pasture land, let it also be early laid on, and spread very thin, breaking any lumps afterwards which are not completely separated by the first spreading. If marl is of the white, or any of the loose or crumbling sorts, it need not be laid on so early, because these varieties break and dissolve almost as soon as exposed to the weather.

There are many kinds of impure and mixed marls, such as sandy, clayey, loamy, and stony marls, according as these varieties of soil are incorporated or mixed with the principal substance. These sorts, of course, are inferior to the pure marls; but the stoney kind is considered to be the best, because its efficacy is more lasting, though the fat and crumbling kinds enrich or operate more speedily. The hard marls, however, in every case, operate for the greatest length of time, and are often followed with bad consequences to the soil unless good management, with regard to cropping, is exercised during the period of their operation. After being long excessively fruitful and productive, the soil will gradually become so sterile and barren as scarcely to be worth cultivating; in which case, the greatest exertion can hardly procure a return of fertility. In this respect, the effect of over-cropping land that has been marled, is precisely the same as takes place with lime. An uncommon exertion is made, occasioning a proportionate debility; though, were good husbandry studiously practised, the exertion would neither be so excessive, in the first instance, nor the after-consequences so mischievous. In numerous instances, land has been reduced so much as to be thought little better than useless, by the effects of lime and marl. Both, however, are excellent agents in forwarding agriculture, though often their agency has been misapplied, and used for mischievous purposes. Under a correct rotation of cropping, and with a suitable supply of dung, neither the lime nor marl is injurious. Reverse these circumstances, and the contrary effect must necessarily be produced.—*Brown's Treatise on Agriculture and Rural Affairs.*

HARVESTING.

When crops are suffered to stand on the ground until they have fully ripened, they exhaust the soil considerably more, than if taken off in a green state. The same is the case in regard to weeds of every description. Perhaps the remark is not so fully applicable to crops of roots.

It may therefore be said that lands are negatively improved, in a saving of their usual exhaustion, by taking such crops off the ground as soon as they have attained a sufficient degree of maturity. This is a matter that is worthy of consideration, especially when it is remembered that several kinds of crops may be severed from the ground, without injury, in some cases with a saving, before they have fully ripened.

Thus, Indian corn may be cut up while the stalks are still greenish, and set up in shocks for the ears to harden; and in this way much good fodder will be saved; the ground is less exhausted, and the grain is said to be as good. By harvesting oats while the stalks are somewhat green, they will be the better for fodder, and the grain will receive no injury thereby. The same may be observed, to a certain extent, in regard to crops of wheat and rye.

Flax pulled when just out of blossom is considered by some the best. The pea-pod is injured by standing too long; as in that case the hull becomes of little value. In short, no crops of grain derive any benefit from standing until the stalks are completely dead, except when the grain is to be used for seed.

The period at which wheat, and in short, all the other sorts of white crops should be cut, is when the straw begins to shrink, and becomes white about half an inch below the ear; the circulation is then cut off and all further benefit from its standing is at an end; the grain has, in fact, taken every thing that is requisite to perfect it from the ground.

By cutting early it will yield more and whiter flour; will waste less by shelling; the harvesting will be expedited, so as to prevent the waste of shelling, by having the last cuttings become too ripe; and as far as the value of the straw, whether for fodder or other purposes, is concerned, an advantage is gained by cutting it while the circulation is going on, and by that means preserving a part of the natural juices; the value of straw, like that of hay, depending upon the proportion of natural juices it contains, and the pains which have been taken to preserve them.

Some farmers determine when grain is fit to cut, by the following signs: when the straw is all turned, excepting at the joints; when the kernel becomes so hard that it cannot be mashed between the thumb and finger; or when the straw below the ear becomes so dry, that no juice can be forced out by twisting it. If the weather is fine, it can be bound, and put into the shock immediately after cutting; but if the stalk is stout, and the ear full and heavy, it should lay till the after part of the day; it can then be bound, shocked, stacked, or carted with safety, provided it is housed where it can have free air, or the mows do not become too large. Sheaves should generally not be larger than can be bound with a single length of the straw. Grain should be carted when the air has a small degree of dampness, to prevent scattering.

When a severe blight or rust has struck rye or wheat, it should be cut immediately, even if the grain be in the milky state: and it should lie on the ground, but not so close as to injure the heads, until such time as the stalks have become dry and the grain somewhat hardened.

It is mostly advised that such grain as is much infested with weeds, should be cut three or four days earlier than is usual, that the weeds may wither before the grain become too ripe. A single shower, or even a day's gentle rain, while it lies in swath will not injure it. It is a most essential object, to cut the crop very low, to prevent both the waste of grain, and the loss of straw, the unavoidable consequences of high cutting.

When grain is stacked, a light floor of boards should be mounted on four blocks, set in the ground, and so high as to prevent the entering of vermin. In building a stack, care should be taken to keep the seed ends of the sheaves in the middle, and a little higher than the outer ends.—*Far. Gui.*

Hon. William Jarvis, of Weathersfield, is nominated as a candidate for Governor of Vermont.

From the American Farmer.

ON THE SACCHARUM OF THE SWEET POTATO,

AND ITS FITNESS TO MAKE BEER,

By Robert Hare, M. D. Professor of Chemistry in the University of Pennsylvania.

To JOHN HARE POWEL, ESQ.

Corres. Sec'y of the Penn. Ag. Soc'y.

Dr Tidyman, of South Carolina, lately supplied me with some sweet potatoes, of a kind in which sweet matter is peculiarly abundant, and requested that I would ascertain if there were any sugar in them. Having pared, and by means of the instrument used for slicing cabbages or cucumbers, reduced them to very thin slices; about a pound was boiled in alcohol of the specific gravity of 845, which appeared to extract all the sweetness, yet on cooling, yielded no crystals of sugar. The solution being subjected to distillation, till the alcohol was removed, an uncrystalizable syrup remained. In like manner, when aqueous infusions of the potatoes were concentrated, by boiling or evaporation, the residual syrup was uncrystalizable. It appears, therefore, that the sweet matter of this vegetable is analogous to molasses, or the saccharum of malt.

Its resemblance to the latter was so remarkable, that I was led to boil a wort, made from the potatoes, of proper spissitude, say s. g. 1060, with a due quantity of hops, about two hours.

It was then cooled to about sixty-five degrees, and yest was added. As far as I could judge, the phenomena of the fermentation, and the resulting liquor, were precisely the same as if malt had been used. The wort was kept in a warm place until the temperature was 85 F. and the fall of the head showed the attenuation to be sufficient.*—Yest subsequently rose which was removed by a spoon. By refrigeration a further quantity of yest precipitated, from which the liquor being decanted, became tolerably fine for new beer, and in flavour, exactly like ale made from malt.

I have computed that five bushels of potatoes, would produce as much wort as three bushels of malt; but I suppose that the residue would, as food for cattle, be worth half as much as the potatoes employed.

I believe it possible to make as good liquor from malt in this country, as in England, but that in our climate much more vigilance is required to have it invariably good, principally because the great and sudden changes of temperature, render malting much more precarious. Should the saccharum of the sweet potato prove to be a competent substitute for that of germinated grain, the quality will probably be less variable, since its development requires but little skill and vigilance.

Besides, as it exists naturally in the plant, it may be had where it would be almost impossible to make, or procure malt. Hops, the other material for beer, require only picking and drying to perfect them for use.

They are indigenous to the United States, and may, no doubt, be raised in any part of our territory,

I have dried in my evaporating oven, some of the sweet potatoes in slices. It seems to me that in this state they will keep a long while, and may be useful in making leaven for bread. They may take the place of the malt necessary in a certain proportion, to render distillers' wash fermentable. The yest yielded by the potato beer, appeared in odour and flavor, to resemble that from malt beer surprisingly, and the quantity, in proportion, was as great. In raising bread it was found equally efficacious.

I propose the word suavin, from the Latin suavis, sweet, to distinguish the syrup of the sweet potato. The same word might, perhaps, be advantageously applied as a generic appellation to molasses, and the uncrystalizable sugar of grapes, of honey, and of malt.

Crystallizable sugar might be termed saccharine, since the terminating syllable of saccharum is appropriated in chemistry to metals.

* In passing to this state, there should be a loss in gravity of about 4 per cent.

PICTURE OF A DROUGHT.

The last Macon Telegraph, after stating the very flattering prospects of the planter a few weeks since, says, the scene is now changed.—From almost every part of the state we hear the most melancholy accounts of the long continued drought, and the *utter prostration* of the hopes of the farmer—the structure on which the prosperity of the whole community is based.

With a few exceptions, the drought is very general. In some districts no rain has fallen for many weeks; the earth has become fairly baked, and vegetation entirely suspended. Whole cornfields are entirely destroyed; the cornblades, contorted and scorched, fall to the ground; and the shrivelled stocks smoke with heat.

The cotton plant, from its slower growth and deeper roots, suffers later than corn; but it also begins to feel the effects of the drought. The leaves burn up and flowers wither and fall, leaving no boll in their place.

The animal as well as the vegetable kingdom pants with the excessive heat and drought. Inhabitants of ponds and streams are boiled in their own element, or perish by its evaporation. Cattle crop the juiceless herbage, and look to man in vain for succor; their emaciated carcases and sunken eyeballs, as they watch the reluctant clouds, speak the keenness of their suffering.—Large streams have sunk to narrow rills, and fountains are drying up. Instead of dew, impalpable dust, lifted into the air by its dryness and buoyancy, falls on the thirsty herbage. Indeed the atmosphere, in many parts, travellers assure us, is so filled with dust, that respiration is extremely difficult. [Savannah paper.]

CANADA THISTLES.

Dr. Silas Holbrook, of Venice, N. Y. some years since purchased a farm, where he now resides, and found a spot of a quarter of an acre of the Canada Thistle in one of his fields, which from appearance had tenanted the spot for some years. He waited until the blossom appeared, then set his boys to thrash or bruise them thoroughly to the ground; a very few stalks sprouted up again that season, which he bruised and sprinkled with salt. The next season but one solitary stalk made its appearance in the field, which he destroyed in the same way; and declares, he has never seen one on the premises since. [Auburn Free Press.]

A London Alderman is said to have lately made £50,000 by his dealings in hops, and that he would have made £100,000, if it had not been for the perverse intermeddling of the press.

ACACIA.

The *Robinia, Pseudo acacia*, or false acacia, is a native of the United States. It is commonly termed locust tree.

It grows best in warm, sandy land, and becomes fit for timber in about twenty-five years. The greatest use made of the trees, is for ship trennels, fence posts, mill cogs, and fire wood; or, if worked into posts to be set into the ground for garden fences, and other inclosures, they are superior in point of durability to almost any known wood.—The acacia is ornamented as a flowering tree.—The blossoms unfold in June, and perfume the air to a considerable distance with their sweet and fragrant odour. It is easily cultivated, and is of quick growth. As commerce and manufactures improve, the demand for this valuable timber will increase.

The multiplication of this tree has seldom been attempted by seeds, but almost constantly by young trees sprouting up from the wounded roots of the old one. The readiness of the roots of the parent tree, to vegetate, soon after the incumbent sward is broken up by the plough, surpasses that of any other tree; for in soils favourable to their growth, the farmers are obliged to grub with great labour to prevent them from overrunning the land, and whenever suffered to indulge their native luxuriance, they will soon convert a piece of cleared land to forest. It makes good hedges.

Acacia may be propagated by setting the seeds; and, when it is once introduced, numerous plants may be obtained, by cutting its roots near the surface of the ground. As the roots extend rapidly along the surface of the earth, and shoot up numerous suckers, the Acacia may be advantageously planted on the banks of rivers, for consolidating and securing the soil from the encroachments of the current; farther, its wood is eminently adapted to ship building, and, though inferior in point of durability to the oak, it is perhaps preferable to any other timber for barges, and similar vessels of a small size.

The leguminous seeds of this tree, after being divested of their acrid taste, by infusing them in different waters, and afterwards ground into meal, are by the Tongusian Tartars converted into a wholesome *bread:* these seeds are also eagerly eaten by poultry, which may thus be speedily fattened.

It has been asserted, that the leaves of this tree, when prepared in the same manner as *indigo*, may with great advantage be substituted for that expensive dyeing drug. The foliage of the smaller variety of the False Acacia, however, is reputed to be better adapted for such purpose: its culture corresponds with that above stated; and it certainly merits to be more generally cultivated in ornamental shrubberies, where it thrives rapidly, and produces elegant odoriferous yellow flowers, which abundantly supply bees with honey.—The seeds of both varieties also afford a large proportion of expressed oil. It deserves to be noticed, that the yellowish wood of these trees, tho' hard and tough, is very brittle while the plants are young, and they ought, therefore, in exposed situations, to be supported by stakes.

The leaves of acacia are said to afford an agreeable nourishment to horses and horned cattle.—They may be given either green or dry, alone or mixed, with hay or chopped straw.

The flowers of the acacia are said to be used by the Chinese in making that beautiful yellow with

which they stain their silks and stuffs, and colour their paper, in the following manner; take half a pound of these flowers before they are fully blown, and roast them over a clear and gentle fire in a very clean copper pan, continually stirring them with a brisk motion; when they begin to turn yellow, pour on a little water, and let it boil till it become thick, and acquire a deeper colour; then strain the whole through a piece of coarse silk.—To the liquor thus expressed, add half an ounce of alum, and one ounce of calcined and finely-powdered oyster shells; when the whole is well mixed, it will be fit for use.

Domestic Encyclopedia.

EFFECTS OF LIBERTY.

In the dark ages which followed the downfal of the Roman Empire, several republics were founded in the northern parts of Italy; and while ignorance and barbarism prevailed in other European countries, these states under the influence of free institutions, became rich and powerful, and enjoyed the comforts and ornaments of life. "Their ships covered every sea; their factories rose on every shore; their money changers set their tables in every city; and manufactures flourished. We doubt whether any country of Europe, our own perhaps excepted, have at the present time reached so high a point of wealth and civilization as some parts of Italy had attained 400 years ago." The revenue of the republic of Florence was greater 500 years ago, than that which the Grand Duke of Tuscany (in whose dominions Florence is situated) now derives from a territory of much greater extent. The manufacture of wool alone employed 200 factories and 30,000 workmen in that republic; and the cloth annually produced sold for a sum equal to $11,000,000 of our money. Eighty banking houses conducted the commercial operations, not of Florence only, but of all Europe. Two banking houses advanced to Edward the Third of England, a sum in silver equivalent to $3,300,000, when the value of silver was quadruple what it now is. The city and environs contained 170,000 inhabitants; 10,000 children were taught to read in the various schools; 1200 studied arithmetic; and 600 received a learned education. The progress of literature and the arts was proportioned to that of the public prosperity.

All the seven vials of the Apocalypse have since been poured out on those pleasant countries.—Their political institutions have been swept away; their wealth has departed; literature and the arts have declined; the people are trampled on by foreign tyrants, and their minds are enslaved by superstition; eloquence is gagged and reason hoodwinked. [Edinburgh Review.]

WOOL.

A procession of waggons arrived yesterday from Pittsford, (Vt.) with about 19,000 lbs. of Wool.

What is to be done with American Wool, if it is not to be manufactured in America. Sent to Europe? Send "Coal to Newcastle." If the Wool is not to be manufactured here, it cannot be grown here to any profit. The growers want a home market on some terms. *Boston Palladium.*

THAMES TUNNEL.

The aperture which had broken in the Tunnel under the Thames has been closed, after much labour and difficulty.

MULBERRY LEAVES.

Within a year past, the demand for Mulberry leaves has so rapidly increased, that it would be well for those who gather the fruit, to be careful in the preservation of the seed. By thus laying a foundation for a nursery of young trees, a benefit will be confered on all who feel interested in the increase of the silkworm. In the course of a few years, it is anticipated that the manufacture of silk will form an important article in our domestic concerns, and although there will necessarily some time elapse previous to its being carried to any great extent, yet every Mulberry tree that is planted now will contribute something towards its advancement. [Phil. Album.]

CURE FOR DYSENTERY.

A friend has communicated the following, as a cure for that terrible complaint, the Dysentery, which is so apt to prevail at this season of the year. He says he has repeatedly tried it, with the fullest success;—"Take the yolk of three eggs, two ounces loaf sugar, one gill brandy, and one nutmeg, grated, the whole to be incorporated together.—For a grown person, a teaspoonful every two or three hours—a proportionably less quantity for children. [Prov. Pat.]

A lady who has found the following remedy for the prevention of bed bugs, wishes to make it public. After cleansing the bedstead thoroughly, rub it over with hog's lard. The lard should be rubbed on with a woollen cloth. Bugs will not infest such a bedstead for a whole season. [Ohio pa.]

NEW ENGLAND FARMER.

BOSTON, FRIDAY, AUGUST 10, 1827.

FALLEN FRUIT.

Be very careful to gather all punctured or decaying fruits, whether on your trees or on the gronnd, and give them to your hogs. If you do not, the worms which they contain, and which have been the cause of their premature decay, will make their escape into the ground, and you will find the evils, which await their visitations will increase upon you another season.

GRAFTED TREES.

Look over your fruit-trees, which were grafted last spring, or budded last summer, and suffer no shoots from the stocks to remain, for these will rob the grafts of their nourishment.

BUDDING FRUIT TREES.

The operation of common budding is performed any time from the beginning of July to the middle of August; the criterion being the formation of the buds in the axillæ of the leaf of the present year. The buds are known to be ready by the shield or partition of bark to which they are attached, easily parting with the wood. The buds preferred are generally those on the middle of a young shoot, as being neither so apt to run to wood as those at the extremity, nor so apt to lie dormant as those at the lower end. Stocks for budding may in general, be much smaller than for grafting, as the operation may be performed on the same year's shoot. But it may also be performed on shoots or stems of several years' growth, and in such, by inserting a number of buds, a complete tree may be formed at once. For gathering the shoots containing the buds, a cloudy day or an early or late hour is chosen, on the principle, that the leaves being at these periods in a less active state of perspiration, suffer least from being separated from their parent plant. They are preserved fresh, and may be sent a great distance by inserting their ends in water or moist moss; though, in general, they should be used as soon after gathering as possible; indeed, as in grafting and inarching the whole operation ought to be performed with the greatest celerity.

There are a great many kinds of budding, but we shall describe only the four following, which are copied, in substance, from Loudon's Encyclopedia of Gardening.

Shield budding, or T budding is thus performed:—Fix on a smooth part on the side of the stock, rather from than towards the sun, and of a height depending, as in grafting, on whether dwarf, half or whole standard-trees are desired; then with the budding knife make a horizontal cut across the rind, quite through to the firm wood; from the middle of this transverse cut, make a slit downward perpendicularly, an inch or more long, going also quite through to the wood. This done, proceed with all expedition to take off a bud; holding the cutting or scion in one hand, with the thickest end outward, and with the knife in the other hand, enter it about half an inch or more below a bud, cutting near half way into the wood of the shoot, continuing it with one clear, slanting cut, about half an inch or more above the bud, so deep as to take off part of the wood along with it, the whole about an inch and a half long; then directly with the thumb and finger, or point of the knife, slip off the woody part remaining to the bud; which done, observe whether the eye or gem of the bud remains perfect; if not, and a little hole appears in that part, it is improper, or as gardeners express it, the bud has lost its root and another must be prepared. This done, placing the back part of the bud or shield between your lips, expeditiously with the flat haft of the knife separate the bark of the stock on each side of the perpendicular cut, clear to the wood, for the admission of the bud, which directly slip down, close between the wood and the bark to the bottom of the slit. The next operation is to cut off the top part of the shield even with the horizontal first made cut, in order to let it completely into its place, and to join exactly the upper edge of the shield with the transverse cut, that the descending sap may immediately enter the bark of the shield, and protrude granulated matter between it and the wood, so as to effect a living union. The parts are now to be immediately bound round with a ligament of fresh bass, previously soaked in water, to render it pliable and tough, beginning a little below the bottom of the perpendicular slit, proceeding upward closely round every part, except just over the eye of the bud, and continue it a little above the horizontal cut, not too tight, but just sufficient to keep the whole close, and exclude the air, sun, and wet.

Shield-budding reversed, or reversed ⊥ budding, differs from the former in having the transversed cut made at the bottom of the perpendicular slit, instead of at its top, and of course the shield is reversed in its position. This mode is represented as preferable to the other by such as contend that the sap rises in the bark equally with the wood; but as this opinion is now generally considered as exploded, the first or T mode, may justly be considered as the most scientific mode of

budding.

Scalope-budding consists in paring a thin tongue-shaped section of bark from the side of the stock; and in taking a similar section from the shoot of buds, in neither case removing the wood. The section or shield containing the bud is then laid on the corresponding scollop in the stock; its upper edge exactly fitted, as in shield budding, and at least one of its edges as in whip-grafting. After this it is tied in the usual way. The advantages of this mode are, that it can be performed when the wood and bark do not separate freely; on trees having very stiff suberose [cork like,] barks, and at any season of the year. Its disadvantages are, that it requires longer time to perform the operation, and is less certain of success. The French gardeners often bud their roses in this manner in spring; and if they fail, they have a second chance in July by using the common mode.

Budding with double ligatures is a mode invented by Knight, and described by him (Hort. Trans. vol. i. 149) as "a new and expeditious mode of budding." The operations are performed in the manner first above described; but instead of one ligature, two are applied, one above the bud inserted on the transverse section through the bark; the other, which had no farther office than that of securing the bud, was applied below in the usual way. As soon as the buds had attached themselves, the lower ligatures were taken off; but the others were suffered to remain. "The passage of the sap upwards was in consequence much obstructed, and the inserted buds began to vegetate strongly in July (being inserted in June); and when these had afforded shoots about four inches long, the remaining ligatures were taken off to permit the excess of sap to pass on; and the young shoots were nailed to the wall. Being there properly exposed to light, their wood ripened well, and afforded blossoms in the succeeding spring; and these would, he adds, "no doubt have afforded fruit; but that, leaving my residence, I removed my trees," &c.

Future Treatment. In a fortnight at farthest after budding such as have adhered may be known by their fresh appearance at the eye; and in three weeks all those which have succeeded will be firmly united with the stock, and the parts being somewhat swelled in most species, the bandage must be loosened, and a week or two afterwards finally removed. The shield and bud now swell in common with the other parts of the stock; and nothing more requires to be done till spring, when just before the rising of the sap, they are to be headed down close to the bud, by an oblique cut, terminating about an eighth or a quarter of an inch above the shield. In some cases, however, as in grafting, a few inches of the stalk is left for the first season, and the young shoot tied to it for protection from the winds.

STEAMING FOOD FOR SWINE, &c.

Some sort of apparatus for steaming food for swine neat cattle, &c. should be considered as necessary for every farmer, as a pot or other proper vessel to cook his own food in. This is a truth which is now pretty generally acknowledged; many farmers have conveniences for steaming potatoes and other roots for swine, on a small scale, and some few, machinery on a large scale, for steaming hay, &c. for cattle. Loudon says "It has been long known that many sorts of roots, and particularly the potato, become much more valuable by undergoing this sort of preparation. And it is equally well known that when thus prepared they have been employed alone as a substitute for hay, and with cut chaff both for hay and corn, in the feeding of horses as well as other animals.—To a farmer who keeps many horses, or cattle, or even swine or poultry, the practice of boiling their food in steam is so great a saving and advantage that it deserves the most particular attention.—Though potatoes have often been given raw both to horses and cattle, they are found to be infinitely preferable when cooked by steam, as they are thereby rendered much drier, and more nutritive, and better than when boiled in water; this has been long since shown by the experiments of Wakefield of Liverpool who in order to ascertain it, fed some of his horses on steamed and some on raw potatoes, and soon found the horses on the steamed potatoes had greatly the advantage in every respect. Those on the steamed potatoes looked perfectly smooth and sleek, while the others were quite rough. Eccleston also found them useful instead of corn; and the extensive and accurate trials of Curwen have placed the utility and advantage of them in this way beyond all dispute.

The reader may see in the 5th vol. of the New England Farmer, page 306, some notice of the mode of steaming food for cattle, made use of by Robert Smith, Esq. President of the Maryland Agricultural Society. This was more particularly described in an Address delivered to the Maryland Agricultural Society, by Mr Smith. The following is an extract:

"Economy in the feeding of stock is an object of the highest importance, interesting alike to the public and to the individual. The great waste of hay, straw, corn fodder, chaff and other offal apparent on every estate under the prevailing practice of the country, has suggested to me the expediency of having at my dairy farm a steaming apparatus. This I have recently established on a plan so simple and so cheap, that any person in any part of our country may have a similar one, greater or smaller, according to the extent of his farm, and the proposed number of his stock. It consists of an iron boiler and two wooden boxes. The boiler contains 100 gallons. One of the boxes is eight feet, the other five feet long; both three feet wide and three feet deep. The boiler is globular, and was made by screwing together the brims of two salt pans. There is also attached to it a hogshead for any extra cooking.

"The boiler is fixed in brick work, calculated to afford the greatest degree of heat with the smallest waste of fuel. Without pretending to give directions as to the particular construction of such a furnace, I would merely remark, what the physiologists have told us, namely, that heat being produced by the combined operation of the fuel and of the air feeding the fire, that portion only of the air, which passes in contact with the burning fuel, contributes to the production of heat, and that therefore if the fire place should be longer than the heap of burning fuel, a certain portion of air will insinuate itself without going through the fire, and of course, not being decomposed will contribute nothing to the heat.

"To the water in the boiler is given all the heat necessary to generate the required steam. The steam is conveyed into the boxes by copper pipes attached to the bottom of each box, and a false bottom, consisting of several sheets of copper perforated with holes. Into this chamber, four inches high, formed by the two bottoms, the steam is conveyed, and passing through the holes of the false bottom, diffuses itself throughout the whole contents of the box, and thus effectually cooks the great mass of food therein contained. When sufficiently boiled, the steam, by means of a common stop cock, is turned into the other box. At one end of each box and near the bottom, is a spiggot and faucet, by means of which are drawn off the condensed steam and liquid matter, which had oozed out of and been extracted from the cooked materials. This decoction is of a deep chocolate colour and highly flavored. It may be given to calves or it may be returned to and mixed with the steamed food. It, however, may not be amiss to remark, that when a liquid food is proposed, the false bottom is not used.

"In the corner of the steam house next to the pump there is a hogshead of water in which is inserted a leaden tube, the other end of which is immersed in the water of the boiler and nearly to the bottom of it. The admission of the regular supply of water from this reservoir into the boiler is regulated by a stop cock. And the cold water being specifically heavier than the warm will necessarily take its place at the bottom, whilst the hot water will remain at the top. This simple plan is preferred to the self supplying valve, which is apt to get out of order. At the top of the boiler there is a safety valve for the escape of all the redundant steam, the electric force of which would otherwise endanger the whole establishment."

Mr Smith observed that his boiler of 100 gallons had enabled his people for some time to cook every day for more than one hundred head of stock, nourishing food, consisting of cut hay or straw, or corn tops and blades, or corn husks mixed with meal produced from the corn and cob ground together, or with other meal and a due proportion of water. But a boiler of the lowest price, containing 30 gallons would be sufficient to cook food for the stock of most farms in our country. A simple apparatus for the purpose of steaming potatoes and other roots for swine, &c. has long been used in many parts of New England.—The following is a brief description of it. A kettle, holding twelve gallons or more, is set in a furnace of brick or stone, and over this a hogshead with one head taken out, and the other bored full of holes. This is set so close that the steam of the kettle, when boiling, can only rise through the holes, and thence ascend among the articles to be boiled in the hogshead, and pass off at the top.—In this way a hogshead of potatoes will be nearly as soon boiled as a small part of them would be if placed in the kettle underneath.

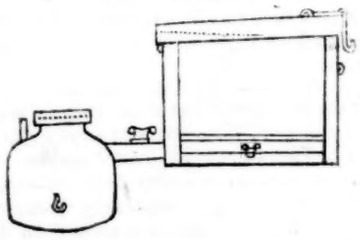
As the kettle is so closed as to prevent any steam from passing off but through the bottom of the hogshead, a pipe or tube is set in such a manner that with the aid of a funnel water may be poured into the kettle as often as is necessary.—After being poured in, the tube is stopped with a plug for that purpose.

Grain of all kinds may be steam-boiled by this apparatus, to great advantage, for feeding or fattening cattle; but in that case, it is requisite to have the bottom of the hogshead covered with a cloth, to prevent the grain from running down through the holes.

The annexed cut will give an idea of a steaming machine described in the Farmer's Magazine

(a work printed in Scotland) vol. xviii. page 74.—It consists of a boiler and wooden chest or box placed over or near it. The box may be of any size, and so placed as to be supplied and emptied by wheel and hand barrows in the easiest manner either by the end or top, or both being made to open. "If the box is made 8 feet by 5, and 3 deep, it will hold as many potatoes as will feed 50 cows for 24 hours, and these may be steamed in an hour." When the chest or box is placed by the side of the boiler, care must be taken so to regulate the fire or arrange the apparatus that the water from the boiler may not boil over into the box. This may be done by carrying the steam pipe up the out side of the box, and letting it enter near the top and then lead down and terminate beneath the false bottom. The boiling water by flowing up a pipe of some length, exposed to the air will be so far cooled as to prevent its running into the box.

Root Steamer.



Remedy for Poison.—A respectable cultivator assures us that a decoction of Thoroughwort *(Eupatorium perfoliatum)* externally and internally applied, is an excellent remedy for poison, either by ivy or dogwood. This plant and its uses are well described by Dr Bigelow in his *American Medical Botany*, vol. i. page 33. It has been long used in New England for various medical purposes, but we have never before heard of its application as an antidote to poison.

Remedy for Burns.—The grease of the skunk, or American pole cat, we are informed, by the person, who communicated the above, is an efficacious application to burns.

Harrisburg Convention.—Delegates to this convention from 13 states assembled at Harrisburg on the 30th ult. Hon. JOSEPH RITNER, of Penn. was chosen President, Jesse Buel, Esq. of New York, and Frisby Tilghman, Esq of Maryland, Vice Presidents; and Redwood Fisher, Esq. of Philadelphia, and William Halstead Jr. Esq. of New Jersey, Secretaries. On the 31st and the two following days Committees were appointed and resolutions formed, which had a tendency to promote the great objects of the meeting.

M. Andre Parmentier, proprietor of the Horticultural Botanic Garden of Brooklyn, N. Y. has been presented with a diploma of corresponding member of the Linnæan Society of Paris and member of the Linnæan Branch of New York, through the hands of Dr Felix Pascalis, President of the Linnæan Branch of France in America.

Catalogues of Prince's Linnæan Botanic Garden, with large additions are now published.—They will be forwarded to any person, by dropping a line to Wm. Prince, Flushing, N. Y. post paid.

Western Rail Road.—The Commissioners appointed to survey a route for a rail road from Boston to the Hudson river at or near Albany, consisting of Judge Mitchell, Col. Samuel M. McKay, and Col. James F. Baldwin, are to commence their tour of observation this week.

Swimming School.—The Trustees of the Humane Society of this city have voted to recommend to the inhabitants of Boston to avail themselves of Dr Lieber's instructions to acquire the art of swimming; and have appropriated $100 to pay for such instruction.

Counterfeit one hundred dollar bills of the bank of the United States of the plate for the Branches are said to be in circulation.

The U. S. ship of the line, North Carolina, commodore Rodgers, arrived in Norfolk, from the Mediterranean, on the 28th. ult. She has been absent 28 months, and her officers and crew are in good health.

The navy of the United States, when all the vessels authorised to be built are afloat, as nearly every one of them may speedily be if required—will consist of 12 ships of the line, 20 frigates, 16 sloops of war, and seven other vessels, exclusive of those on the lakes. To man these will require more than 20,000 men, one half of whom must be seamen.

A Cotton Manufactory is about to be put in operation at Petersburg, Virg. by a company of gentlemen incorporated at the last session of the Legislature of that state. The necessary funds have been subscribed, and the site of the Factory purchased on the Appomatox river. This is the *first* establishment of the kind in Virginia, and we have no doubt it will be rapidly followed by others.

Manufactories are to be desired so long as they enable the public at large to buy cheap. They become a national evil as soon as they raise the price to consumers. In these two sentences, is contained the great principle which should regulate the establishing and maintaining Manufactories.

The skeleton of a mammoth has been found near Scheoley's mountain in New Jersey, by the workmen who were excavating the Morris Canal. It was about three feet below the surface, and in a remarkable state of preservation. One of the tusks weighs 140 pounds, and the grinders look remarkably fresh, though they have probably been buried a thousand years.

Stuart's full length portrait of Washington has been sold to a Russian gentleman for $1000.

The trial of Strang for the murder of Mr. Whipple is concluded, and the prisoner found guilty.

The trial of Mrs. Whipple as an accessary commenced on Monday of last week, and determined on Friday in a verdict of acquittal. Mrs. Whipple was defended by Messrs. Tabor, Williams, & Van Vechten.

Yellow Locust Seed,—Turnip Seed, &c.

For sale at the New England Farmer office, a few lbs. Yellow Locust Seed, superior scarlet short top Radish, White Mulberry, 13 varieties of Turnip, Girkin or pickling Cucumber, &c. with a new assortment of ornamental flower seeds.

Agricultural Books.

Just received for sale at the New England Farmer office, No. 52 North Market Street, the following agricultural books in addition to those advertised July 20.

Parkinson on Live Stock—Lawrence's new Farmer's Calendar—Hayward on Horticulture—Sinclair's Code of Agriculture—Torrey's Botany—one copy of Maddock on the culture of Flowers, with beautifully coloured plates from nature—Nicol's Villa Garden Directory. American Gardener, &c.

Fresh Mulberry Seed.

For sale at the Farmer office, No. 52 North Market Street, genuine White Mulberry Seed, raised in Mansfield, Con. 1827.

Wool.

On Thursday, the 23d of August, at the lower division of the hall over the new Market House, under the direction of the *New-England Society*, will be sold, a large assortment of American fleece WOOL. Wool growers and others, who wish to benefit by this favourable opportunity for disposing of their Wool, are informed, that we are prepared to receive it, any time previous to the 17th of August, at which time the catalogue will be closed. COOLIDGE, POOR & HEAD, *Auc'rs*.

Boston, July 27, 1827.

PRICES OF COUNTRY PRODUCE.

Corrected every Thursday evening.

		FROM	TO
APPLES, best,	bbl		none
ASHES, pot, 1st sort, - - - -	ton.	80 00	82 50
pearl do. - - - - -		92 00	95 00
BEANS, white, - - - - - -	bush	1 50	1 67
BEEF, mess, 200 lbs. new, -	bbl.	9 50	10 00
cargo, No 1, new, - -		8 12	8 75
" No 2, new, - -		7 50	8 00
BUTTER, inspect. No. 1. new,	lb.	12	15
CHEESE, new milk, - - - - -		7	9
skimmed milk, - -		3	5
FLAX - - - - - - - - -			
FLAX SEED - - - - - - -	bush	90	1 00
FLOUR, Baltimore, Howard St	bbl.	5 50	5 62
Genesee, - - -		4 50	4 75
Rye, best, - - -			none
GRAIN, Rye - - - - - -	bush	70	75
Corn - - - - -		62	67
Barley - - - - -			1 00
Oats - - - - - -		35	37
HOGS' LARD, 1st sort, new, -	lb.	9	10
HOPS, No 1, Inspection - -		12	15
LIME, - - - - - -	cask	1 00	1 10
OIL, Linseed, Phil. and Northern	gal.	77	78
PLAISTER PARIS retails at	ton.	2 75	3 00
PORK, Bone Middlings, new,	bbl.	13 00	14 00
navy, mess, do.		10 75	11 50
Cargo, No 1, do. - -		10 50	11 00
SEEDS, Herd's Grass, - -	bush	1 75	2 00
Clover - - - - -	lb.	8	10
WOOL, Merino, full blood, wash		33	45
do do unwashed		20	25
do 3-4 washed		28	34
do 1-2 & 4 do		25	30
Native - - - do		20	25
Pulled, Lamb's, 1st sort		33	37
2d sort		25	30
do Spinning, 1st sort		28	32
PROVISION MARKET.			
BEEF, best pieces - - - -	lb.	8	12
PORK, fresh, best pieces, - -		8	11
" whole hogs, - - -			6¼
VEAL, - - - - - - - -		6	10
MUTTON, - - - - - -		5	9
POULTRY, - - - - - -		15	20
BUTTER, keg & tub, - -		12	16
lump, best, - - -		16	20
EGGS, - - - - - - - -		12	15
MEAL, Rye, retail, - - - -	bush	75	80
Indian, do. - - - -		62	75
POTATOES, (new) - - -		45	50
CIDER, (according to quality)	bbl.	2 00	4 00

Miscellanies.

Sir Jonah Barrington remarks in his sketches, "in truth, the only three kinds of death the Irish peasantry think natural, are dying quietly in their own cabins; being hanged about assize time; or when the potato crop is deficient."

Some caution is requisite in passing our opinions upon strangers: a caution, however, which few of us adopt. At a publick levee at the court of St. James, a gentleman said to Lord Chesterfield, "pray, my lord, who is that tall, awkward woman, yonder?" "That lady, sir," replied Lord Chesterfield, "is *my sister*." The gentleman reddened with confusion, and stammered out, "no, no, my lord, I beg your pardon; I mean that very ugly woman, who stands next to the Queen." That lady, sir, is *my wife*."

A shopkeeper at Doncaster, had, by his conduct obtained the name of 'the little rascal.' Being asked why this appellation had been given him, he replied, "To distinguish me from the rest of my trade here, who are all *great rascals*.'

The being Prime Minister of England has often been attended with a dreadful fate—Of 31, since the *reformation* [it may be inferred it was worse before]—13 have been executed—2 murdered—8 died in prison or exile—some committed suicide—and 4 are said to have saved themselves by sacrificing their Masters.

Reminiscence.—It is stated in the first of Caleb Atwater's notes on Ohio, that the first vessel ever launched by Europeans on the Upper Lakes, was built in 1680, by La Salle, a Frenchman—one hundred and forty-seven years ago! She was called the Griffin.

Increase of Population.—The Annual Report of the American Education Society states that the population of the United States is advancing at the rate of 1000 every day—365,000 a year.

Sheep—About the time of the adoption of the Federal Constitution, it was looked upon as extravagant that the number of sheep in the United States should be estimated at one million.

There is a prospect of an abundant harvest throughout the England. A gentleman who had just returned to England from a journey through Russia, Poland, Sweden, and Denmark, states that the crops of grain are, if possible, more promising than in England.

Letters from Frankfort on the Main announce that the continual rains which have prevailed for some time, have given occasion to extensive business in corn. In Hungary the crop of fruit is completely destroyed. On several other points of Germany the winter wheats present a wretched appearance. The fine alone is in a thriving state.

Mr. Vaughan, the British Minister, paid to Mr. Clay, at the Department of State, on Monday, the second and last instalment, amounting to upwards of $600,000, payable by the Government of Great Britain, under the Convention of November last.

Silk Reel.—Any person having a model for a French Reel *for reeling Silk* from the Cocoon, will confer a favour on a cultivator, of silk by sending their address to the office of the Baltimore Patriot.

MAHOGANY.

The Honduras Almanac for 1827 gives a long account of the manner in which mahogany is cut and transported in Honduras, a British province on the Mosquito shore, Guatimala. The mahoganiy tree is of enormous size and height, and the branches spread to a great distance. A tree is not fit for cutting until it is 200 years old. This beautiful wood was discovered in 1559, and was first carried to England about the year 1700.—The first article made from it was a candle box, and the fine colour and beautiful polish were so pleasing that bureaus and other articles were soon manufactured from the same material. The mahogany cutters go into the forests in August, in gangs of from 20 to 50 each, and the "huntsman," having climbed a tall tree, surveys the surrounding country, ascertains where the mahogany abounds, and leads the gang to the place. Having felled a great number of trees, they cut a road through the thick forest to the nearest river, make bridges, build huts for themselves and cattle, &c.—About the first of December they begin to saw each mahogany tree, both trunk and branches, into logs. These logs vary in length and size—the largest ever cut in Honduras was 17 feet long, 5 feet 4 inches deep, and weighing 15 tons. After the sawing is completed, the logs are reduced by the axe, from the round to the square form, to lessen their weight, and prevent their rolling on the truck. When the dry season commences, about the first of April, they begin to draw the logs to the river. The distance is generally from 6 to 10 miles; each truck requires 7 pairs of oxen, 2 drivers, 2 or 3 to cut food for the cattle, and several loaders. The heat of the sun is so great that every thing must be done by night. The teams start from the river at 6 o'clock in the evening, and return with their loads the next morning; the drivers after throwing the logs into the river, retire to rest. Thus goes on the routine of trucking during the months of April and May. This process of drawing down mahogany to the river, presents an extraordinary spectacle. Six trucks and 40 yokes of oxen occupying the road for a quarter of a mile—the drivers half naked, and each bearing a torch light—the wildness of the forest scenery—the rattling of the chains—the sound of the whip echoing through the woods—all this activity and exertion so ill corresponding with the silent hour of midnight—make it wear the appearance of some theatrical exhibition. About the end of May the rains commence, the roads are impassable, and all trucking ceases. After the rivers are swollen, the logs are floated down a distance of 200 miles, until they are stopped by a boom, where each gang seperates its own cutting. The logs are then brought to the wharves, taken out of the water, and the surface made smooth by an axe, when they are ready for shipping.—*Hamp. Gaz.*

Hard Soap.—To make hard soap Soda should be dissolved and leached through quick lime.—Six times as much olive oil or tallow are to be added as the quantity of Soda used. The lie is then to be gently boiled, and the ingredients will unite into a hard white Soap, if the carbonic acid be properly taken from the Soda. If a quantity of rosin be added it forms the common yellow bar Soap. To make the soap marbled, soap makers add copperas, cinnabar, &c. to it before it is made into cakes.

The Albany Argus speaks in favorable terms of "Pope's improved hand threshing machine." It combines simplicity and strength in its construction, and with two men at the wheel, and one to feed the machine will thresh five bushels per hour, throwing out the grain thoroughly. The cost of it is not one third the average cost of the Scotch and English machines. It has been highly approved of by the Massachusetts Agricultural Society, in all instances where an opportunity has been afforded to test its practical utility.

Domestic Economy.

Rice Jelly. This is one of the most nourishing preparations of rice, particularly for valetudinarians or convalescents. It is thus made: Boil a quarter of a pound of rice flour, with half a pound of loaf sugar, in a quart of water, till the whole becomes one uniform gelatinous mass; then strain off the jelly and let it stand to cool. A little of this salubrious food eaten at a time, will be found very beneficial to those of a weakly and infirm constitution.

To cleanse the Teeth and to improve the breath. To four ounces of fresh prepared lime water add a drachm of Peruvian bark, and wash the teeth with this water in the morning before breakfast, and after supper. It will effectually destroy the tartar, and remove the offensive smell from those which have most decayed.

Vinegar of Roses. This fine vinegar is made by putting a quantity of fresh rose leaves loosely into a jar or bottle, pouring upon them the best white wine vinegar so as to fill it up to the height first occupied by the leaves, if, for example, the jar be thus apparently filled, there will be still room enough for the proper quantity of vinegar; let it remain for three weeks in the sun or some other warm situation, when it may be strained off and passed through a cotton or flannel bag. If it is not sufficiently fine, after having been strained, to put up into bottles, it is to be cleared in the usual way, either by means of isinglass or a little alum-water. It is commonly kept in large bottles; which should be well corked and kept in a dry place. A lump of refined sugar should be put into each bottle. In this way are also to be made vinegar of gilliflowers, elder flowers, &c. &c.

Saxony Sheep.

On Friday the 24th August next, at 3 o'clock P. M. at Brighton near Boston, will be sold by public auction, a choice stock of about 100 Saxony Rams, just imported in the brig Comet, Capt. Meef, from Hamburg.

These sheep were selected from the purest blood in the kingdom, and will be found at least, equal in point of fineness of fleece and symmetry of form to any heretofore imported. The sale will be perfectly free and unlimited.

Samples of the wool from different parts of each animal may be seen at No. 46 Central street, or at the office of the auctioneers, at any time previous to the sale. COOLIDGE, POOR & HEAD.

J. & A. Fales' Patent Hoes,

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